

encoding said time position information along with said subframe, and

multiplexing said encoded time position information and a bit stream of said encoded subframe to transmit said encoded time position information and said bit stream.

2 (Amended). A method for encoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including NxM pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded; and

varying [the] a number of said blocks included in said subframe according to a quantity of information generated by encoding each block to vary a spatial size of each of said subframes included in each frame.

3 (Amended). A method for encoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including NxM pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded;

setting an identifier to said subframe to identify said subframe;

specifying a frame to which said subframe belongs by adding [to said identifier] time position information to

said identifier, the time position information representing an order of displaying said subframe;

encoding said time position information along with said subframe, and

multiplexing said encoded time position information and a bit stream of said encoded subframe to transmit said encoded time position information and said bit stream;

171 [and] 173

171 [varying the] wherein a number of said blocks included in said subframe is varied according to a quantity of information generated by encoding each block to vary a spatial size of each of said subframes included in each frame.

4. The method for encoding digital motion picture signals of a frame according to claim 2, wherein each of said subframes included in said frame has an equal sum of quantities of generated information of said blocks included in said subframe.

5. The method for encoding digital motion picture signals of a frame according to claim 3, wherein each of said subframes included in said frame has an equal sum of quantities of generated information of said blocks included in said subframe.

6 (Amended). A method for encoding and decoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including NxM pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded;

setting an identifier to said subframe to identify said subframe;

specifying a frame to which said subframe belongs by adding [to said identifier] time position information to

said identifier, the time position information representing an order of displaying said subframe;

encoding said time position information along with said subframe;

multiplexing said encoded time position information and a bit stream of said encoded subframe to transmit said encoded time position information and said bit stream; and

decoding each of said subframes appropriately in relation to time by decoding and using said time position

information to form said frame of said digital moving picture signals.

7. A method for encoding and decoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including NxM pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded;

varying the number of said blocks included in said subframe according to a quantity of information generated by encoding each block to vary a spatial size of each of said subframes included in each frame; and

decoding each of said subframes to form said frame of said digital moving picture signal.

8 (Amended). A method for encoding and decoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including NxM pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded,

setting an identifier to said subframe to identify said subframe;

specifying a frame to which said subframe belongs by adding [to said identifier] time position information to

said identifier, the time position information representing an order of displaying said subframe;

encoding said time position information along with said subframe;

multiplexing said encoded time position information and a bit stream of said encoded subframe to transmit said encoded time position information and said bit stream;

[varying the number of said blocks included in said subframe according to a quantity of information generated by encoding each block to vary a spatial size of

each of said subframes included in each frame; and] 173

decoding said subframe appropriately in relation to time by decoding and using said time position information to form said frame of said digital moving picture signal,

wherein a number of said blocks included in said sub-frame is varied according to a quantity of information generated by encoding each block to vary a spatial size of

each said subframe included in each frame.

9. The method for encoding and decoding digital motion picture signals of a frame according to claim 7, wherein each of said subframes included in said frame has an equal sum of quantities of generated information of said blocks included in said subframe.

10. The method for encoding and decoding digital motion picture signals of a frame according to claim 8, wherein each of said subframes included in said frame has an equal sum of quantities of generated information of said blocks included in said subframe.

11. The method for encoding digital motion picture signals of a frame according to claim 1, wherein said step of adding time position information comprises adding the time information to each subframe of said frame.

12. The method for encoding digital motion picture signals of a frame according to claim 11, further comprising the step of maintaining substantially constant a quantity of information generated for each subframe within said frame thereby to vary spatial dimensions represented by each said subframe.

13. The method for encoding digital motion picture signals of a frame according to claim 1, further comprising the step of maintaining substantially constant a quantity of information generated for each subframe within said frame thereby to vary spatial dimensions represented by each said subframe.

14 (Amended). The method for encoding and decoding digital motion picture signals of a frame according to claim 6, wherein said

encoding said time position information along with said subframe, and  
multiplexing said encoded time position information and a bit stream of said encoded subframe to transmit said encoded time position information and said bit stream.

[2. A method for encoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including  $N \times M$  pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded; and

varying the number of said blocks included in said subframe according to a quantity of information generated by encoding each block to vary a spatial size of each of said subframes included in each frame.]

[3. A method for encoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including  $N \times M$  pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded;

setting an identifier to said subframe to identify said subframe;

specifying a frame to which said subframe belongs by adding to said identifier time position information representing an order of displaying said subframe;

encoding said time position information along with said subframe, and

multiplexing said encoded time position information and a bit stream of said encoded subframe to transmit said encoded time position information and said bit stream; and

varying the number of said blocks included in said subframe according to a quantity of information generated by encoding each block to vary a spatial size of each of said subframes included in each frame.]

[4. The method for encoding digital motion picture signals of a frame according to claim 2, wherein each of said subframes included in said frame has an equal sum of quantities of generated information of said blocks included in said subframe.]

[5. The method for encoding digital motion picture signals of a frame according to claim 3, wherein each of said subframes included in said frame has an equal sum of quantities of generated information of said blocks included in said subframe.]

[6. A method for encoding and decoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including  $N \times M$  pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded;

setting an identifier to said subframe to identify said subframe;

specifying a frame to which said subframe belongs by adding to said identifier time position information representing an order of displaying said subframe;

encoding said time position information along with said subframe;

multiplexing said encoded time position information and a bit stream of said encoded subframe to transmit said encoded time position information and said bit stream; and

decoding each of said subframes appropriately in relation to time by decoding and using said time position

information to form said frame of said digital moving picture signals.]

[7. A method for encoding and decoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including  $N \times M$  pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded;

varying the number of said blocks included in said subframe according to a quantity of information generated by encoding each block to vary a spatial size of each of said subframes included in each frame; and

decoding each of said subframes to form said frame of said digital moving picture signal.]

[8. A method for encoding and decoding digital motion picture signals of a frame, comprising the steps of:

dividing said frame into plural blocks each including  $N \times M$  pixels;

forming a subframe composed of a set of said blocks, said subframe being a unit to be encoded;

setting an identifier to said subframe to identify said subframe;

specifying a frame to which said subframe belongs by adding to said identifier time position information representing an order of displaying said subframe;

encoding said time position information along with said subframe;

multiplexing said encoded time position information and a bit stream of said encoded subframe to transmit said encoded time position information and said bit stream;

varying the number of said blocks included in said subframe according to a quantity of information generated by encoding each block to vary a spatial size of each of said subframes included in each frame; and

decoding said subframe appropriately in relation to time by decoding and using said time position information to form said frame of said digital moving picture signal.]

[9. The method for encoding and decoding digital motion picture signals of a frame according to claim 7, wherein each of said subframes included in said frame has an equal sum of quantities of generated information of said blocks included in said subframe.]

[10. The method for encoding and decoding digital motion picture signals of a frame according to claim 8, wherein each of said subframes included in said frame has an equal sum of quantities of generated information of said blocks included in said subframe.]

11. The method for encoding digital motion picture signals of a frame according to claim 1, wherein said step of adding time position information comprises adding the time information to each subframe of said frame.

12. The method for encoding digital motion picture signals of a frame according to claim 11, further comprising the step of maintaining substantially constant a quantity of information generated for each subframe within said frame thereby to vary spatial dimensions represented by each said subframe.

13. The method for encoding digital motion picture signals of a frame according to claim 1, further comprising the step of maintaining substantially constant a quantity of information generated for each subframe within said frame thereby to vary spatial dimensions represented by each said subframe.

[14. The method for encoding and decoding digital motion picture signals of a frame according to claim 6, wherein said

step of adding time position information comprises adding the time information to each subframe of said frame.]

[15. The method for encoding digital motion picture signals of a frame according to claim 14, further comprising the step of maintaining substantially constant a quantity of information generated for each subframe within said frame thereby to vary spatial dimensions represented by each said subframe.]

[16 (Amended). The method for encoding digital motion picture signals of a frame according to claim 6, further comprising the step of maintaining substantially constant a quantity of information generated for each subframe within said frame thereby to vary spatial dimensions represented by each said subframe.]

17 (Added). A method for decoding an encoded bit-stream, said method comprising:

- (a) receiving said encoded bitstream containing an identifier, an encoded subframe obtained by encoding a subframe composed of at least one of said blocks, and an encoded time position information representing an order of displaying said subframe, wherein said identifier is set to said encoded subframe to identify said subframe, said encoded time position information is added to said identifier by specifying a frame to which said subframe belongs;
- (b) detecting said identifier to extract said encoded time position information from said encoded bitstream;
- (c) decoding said extracted encoded time position information to obtain decoded time position information; and
- (d) decoding said encoded subframe to form said frame according to said decoded time position information.

18 (Added). A method for decoding an encoded bit-stream, said method comprising:

- (a) receiving said encoded bitstream containing an identifier, an encoded subframe obtained by encoding a subframe composed of at least one of said blocks, and an encoded time position information representing an order of displaying said subframe, wherein said identifier is set to said encoded subframe to identify said subframe, said encoded time position information is added to said identifier by specifying a frame to which said subframe belongs, a number of blocks included in said subframe being varied according to a quantity of information generated by encoding each block in order to vary a spatial size of each of said subframes included in each frame;
- (b) detecting said identifier to extract said encoded time position information from said encoded bitstream;
- (c) decoding said extracted encoded time position information to obtain decoded time position information; and
- (d) decoding said encoded subframe to form said frame according to said decoded time position information.

19 (Added). A method for encoding digital motion picture signals of a frame, comprising:

- dividing said frame into plural blocks each including NxM pixels;
- forming a subframe composed of at least one of said blocks, said subframe being a unit to be encoded;
- setting an identifier to said subframe to identify said subframe;
- specifying a frame to which said subframe belongs by adding time position information to said identifier, the time position information representing an order of displaying said subframe;
- encoding said time position information and said spatial position information along with said subframe, and

multiplexing said encoded time position information, said encoded spatial position information and a bit stream of said encoded subframe to transmit said encoded spatial position information, said encoded time position information and said bit stream.

20 (Added). A method for encoding and decoding digital motion picture signals of a frame, said method comprising:

- dividing said frame into plural blocks each including NxM pixels;
- forming a subframe composed of at least one of said blocks, said subframe being a unit to be encoded;
- setting an identifier to said subframe to identify said subframe;
- specifying a frame to which said subframe belongs by adding time position information to said identifier, the time position information representing an order of displaying said subframe;
- specifying a spatial position of said subframe within said frame by adding spatial position information to said identifier, the spatial position information representing said spatial position of said subframe within said frame;
- encoding said time position information and said spatial position information along with said subframe;
- multiplexing said encoded time position information, said encoded spatial position information and said encoded subframe to transmit said encoded spatial position information, said encoded time position information and said encoded subframe as an encoded bitstream;
- receiving said encoded bitstream;
- detecting said identifier to extract said encoded time position information and said encoded spatial position information from said encoded bitstream;
- decoding said extracted encoded time position information to obtain decoded time position information;
- decoding said extracted encoded spatial position information to obtain decoded spatial position information; and
- decoding said encoded subframe to form said frame according to said decoded spatial position information and said decoded time position information.

21. (Newly Added) A method for decoding an encoded bitstream, said method comprising:

- (a) receiving said encoded bitstream containing an identifier, an encoded subframe obtained by encoding a subframe composed of at least one of said blocks, and an encoded spatial position information representing a spatial position of said subframe within a frame composed of a plurality of subframes and an encoded time position information representing an order of displaying said subframe,
- wherein
- said identifier is set to said encoded subframe to identify said subframe,
- said encoded time position information is added to said identifier by specifying a frame to which said subframe belongs, and
- said encoded spatial position information is added to said identifier by specifying a spatial position of said subframe within said frame;
- (b) detecting said identifier to extract said encoded spatial position information and said encoded time position information from said encoded bitstream;
- (c) decoding said extracted encoded time position information to obtain decoded time position information;
- (d) decoding said extracted encoded spatial position information to obtain decoded spatial position information; and

13

(e) decoding said encoded subframe to form said frame according to said decoded spatial position information and said decoded time position information.

22 (Added). The method for decoding according to claim 21, wherein in the case any conflict is detected in at least one of the decoded time position information and the decoded spatial position information corresponding to current encoded subframe, a procedure of detecting said identifier is executed to establish synchronization of a subframe layer without decoding said current encoded subframe.

23 (Added). The method for decoding according to claim 21, wherein in the case any conflict is detected in a process of decoding a current block layer within said encoded subframe, a procedure of detecting said identifier is executed to establish synchronization of a subframe layer without decoding said current block layer

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